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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------|--|----------------------|---------------------|------------------|
| 10/808,429 | 03/25/2004 | Shyh-Kwei Chen | YOR920040052US1 | 6945 |
| 48150 MCGINN INT | ICGINN INTELLECTUAL PROPERTY LAW GROUP, PLLC 321 OLD COURTHOUSE ROAD | | EXAMINER | |
| | | | Johnson, Johnese T | |
| VIENNA, VA 22182-3817 | | | ART UNIT | PAPER NUMBER |
| | | | 2166 | |
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| • | • | | 02/13/2008 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

A

| | Application No. | Applicant(s) | | | | |
|---|---|--------------|--|--|--|--|
| Office Action Commence | 10/808,429 | CHEN ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| · | Johnese Johnson | 2166 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | • | | | | |
| 1)⊠ Responsive to communication(s) filed on 09 No | ovember 2007. | | | | | |
| | action is non-final. | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the | | | | | | |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposition of Claims | | | | | | |
| 4)⊠ Claim(s) 1 and 3-38 is/are pending in the application | 4)⊠ Claim(s) <u>1 and 3-38</u> is/are pending in the application. | | | | | |
| 4a) Of the above claim(s) is/are withdraw | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1 and</u> 3-38 is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | |
| Application Papers | | | | | | |
| | | | | | | |
| 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | |
| ,— | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No. | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| | | | | | | |
| Attachment(s) | | • | | | | |
| 1) Notice of References Cited (PTO-892) | 4) Interview Summary | | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Da 5) Notice of Informal P | | | | | |
| Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date | 6) Other: | | | | | |

Application/Control Number: 10/808,429 Page 2

Art Unit: 2166

DETAILED ACTION

Remarks

- 1. In response to the Amendment filed on 9 November 2007, claims 1 and 3-38 are pending.
- 2. The rejection under 35 USC 101 to claims 13-20 are maintained because although the claims are directed to a system, "the system is in fact software modules, i.e., software per se.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 13-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 13- 20 are directed to software modules which is *software per se*.

Software per se is also known as nonfunctional descriptive material (See MPEP 2106).

The claims must be amended to recite *hardware* (i.e. processor, memory, etc...) in the body to overcome the rejection.

Application/Control Number: 10/808,429. Page 3

Art Unit: 2166

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1, 3-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burke et al. (US Pat. No. 6,789,252), in view of Sheard et al. (US Pat. No. 6,208,345), and further in view of Mitchell et al. (US PG Pub. No. 2005/0229186).

As to claim 1, Burke et al. disclose:

determining an object definition for an object based upon a collaboration code (see col.

19, lines 22-24); and

Storing said business object definition (see col. 25, lines 23-25).

However, <u>Burke et al.</u> does not explicitly disclose:

receiving an object and a collaboration code

Sheard et al. Discloses:

receiving an object (see col. 31, line 31) and a collaboration code (see col. 14, lines 28-31).

It would have been obvious to have modified the teachings of <u>Burke et al.</u> by the teachings of <u>Sheard et al.</u> to provide an improved data integration system and methodology capable of effectively integrating data produced by

Art Unit: 2166

applications of varying technologies (see <u>Sheard et al.</u> col. 2, lines 65-67 and col. 3, line 1).

However the combination of <u>Burke et al.</u> and <u>Sheard et al.</u> does not explicitly disclose: wherein said collaboration code determines said business object definition for said object without pre-defined business object definitions.

Mitchell et al does disclose:

wherein said collaboration code determines said business object definition for said object without pre-defined business object definitions (see paragraphs [0022] - [0025]).

It would have been obvious to have modified the teachings of <u>Burke et al.</u> and <u>Sheard et al.</u> by the teachings of <u>Mitchell et al.</u> to dynamically aggregate inheritance, data, functionality, and entire types to runtime objects (see <u>Mitchell et al</u> paragraph [0017]), because previous methods were too costly and too time consuming (see <u>Mitchell et al</u> paragraph [0010]).

As to claim 3, <u>Burke et al.</u>, as modified, discloses:

wherein said object comprises a business object (see <u>Burke et al.</u> col. 34, lines 26-28 and 37-42).

As to claim 4, Burke et al., as modified, discloses:

forwarding said object and said object definition (see Burke et al. col. 34, lines 45-48).

Art Unit: 2166

As to claim 5, Burke et al., as modified, discloses:

wherein said forwarding comprises forwarding said object and said object definition to an application adapter (see <u>Burke et al.</u> col. 34, lines 26-28 and 37-42 and col. 42, lines 64-66).

As to claim 6. Burke et al., as modified, discloses:

processing said object based upon said object definition in said application adapter (see Burke et al. col. 6, lines 20-21).

As to claim 7. Burke et al., as modified, discloses:

wherein said collaboration code determines how data from a second object is mapped to said object (see <u>Burke et al.</u> col. 21, lines 1-8).

As to claim 8, Burke et al., as modified, discloses:

wherein said collaboration code determines how said object is derived from said second object (see Burke et al. col. 21, lines 1-5).

As to claim 9, Burke et al., as modified, discloses:

wherein said collaboration code determines how said object is derived from said second object and a second object definition (see <u>Burke et al.</u> col. 21, lines 1-5).

As to claim 10, Burke et al., as modified, discloses:

Art Unit: 2166

further comprising receiving said second object definition (see <u>Burke et al.</u> col. 34, lines 26-28 and 37-42 and <u>Burke et al.</u> col. 21, line 3 – second object).

As to claim 11, Burke et al., as modified, discloses:

wherein said determining comprises determining said object definition for said object based upon said collaboration code and said second object definition (see <u>Burke et al.</u> col. 17, lines 48-49 and <u>Burke et al.</u> col. 21, line 3 – second object).

As to claim 12, Burke et al., as modified, discloses:

wherein said receiving comprises receiving said object and said collaboration code from a broker (see <u>Burke et al.</u> col. 34, lines 26-28 and 37-42; wherein the means allows data to be exchanged/ integrated in different formats).

As to claim 13, Burke et al. discloses:

means for determining an object definition for said object based upon said collaboration code (see col. 17, lines 48-49 and col. 20, lines 10-11).

However, <u>Burke et al.</u> does not explicitly disclose:

means for receiving an object and a collaboration code.

Sheard et al. disclose:

means for receiving an object (see col. 31, line 31) and a collaboration code (see col. 14, lines 28-31).

Art Unit: 2166

It would have been obvious to have modified the teachings of <u>Burke et al. et al.</u> by the teachings of <u>Sheard et al.</u> to provide an improved data integration system and methodology capable of effectively integrating data produced by applications of varying technologies (see <u>Sheard et al.</u> col. 2, lines 65-67 and col. 3, line 1). However the combination of <u>Burke et al.</u> and <u>Sheard et al.</u> does not explicitly disclose: wherein said collaboration code determines said business object definition for said object without pre-defined business object definitions.

Mitchell et al does disclose:

wherein said collaboration code determines said business object definition for said object without pre-defined business object definitions (see paragraphs [0022] - [0025]).

It would have been obvious to have modified the teachings of <u>Burke et al.</u> and <u>Sheard et al.</u> by the teachings of <u>Mitchell et al.</u> to dynamically aggregate inheritance, data, functionality, and entire types to runtime objects (see <u>Mitchell et al</u> paragraph [0017]), because previous methods were too costly and too time consuming (see Mitchell et al paragraph [0010]).

As to claim 14, <u>Burke et al.</u>, as modified, discloses: wherein said object comprises a business object (see <u>Burke et al.</u> col. 34, lines 26-28 and lines 37-42).

As to claim 15, Burke et al., as modified, discloses:

Art Unit: 2166

means for forwarding said object and said object definition to an application adapter (see <u>Burke et al.</u> col. 34, lines 26-28 and lines 37-42 and <u>Burke et al.</u> col. 42, lines 64-66).

As to claim 16, Burke et al., as modified, discloses:

wherein said collaboration code determines how data from a second object is mapped to said object (see Burke et al. col. 21, lines 1-8).

As to claim 17, Burke et al., as modified, discloses:

means for receiving a second object definition, wherein said collaboration code determines how said object is derived from said second object and said second object definition (see Burke et al. col. 21, lines 1-5).

As to claim 18, Burke et al., as modified, discloses:

wherein said means for determining comprises means for determining said object definition for said object based upon said collaboration code and said second object definition (see <u>Burke et al.</u> col. 17, lines 48-49 and <u>Burke et al.</u> col. 21, line 3 – second object).

As to claim 19, <u>Burke et al.</u>, as modified, discloses:

Art Unit: 2166

wherein said means for receiving comprises means for receiving said object and said collaboration code from a broker (see <u>Burke et al.</u> col. 34, lines 26-28 and 37-42; wherein the means allows data to be exchanged/ integrated in different formats).

As to claim 20, Burke et al., disclose:

determines a first object definition based upon said collaboration code (see col. 19, lines 22-24).

However, <u>Burke et al.</u> do not explicitly disclose:

a reverse object discovery agent that receives a first object and a collaboration code from a broker.

Sheard et al. disclose:

a reverse object discovery agent that receives a first object (see col. 31, line 31) and a collaboration code (see col. 14, lines 28-31).

It would have been obvious to have modified the teachings of <u>Burke et al.</u> by the teachings of <u>Sheard et al.</u> to provide an improved data integration system and methodology capable of effectively integrating data produced by applications of varying technologies (see <u>Sheard et al.</u> col. 2, lines 65-67 and col. 3, line 1).

However the combination of <u>Burke et al.</u> and <u>Sheard et al.</u> does not explicitly disclose: wherein said collaboration code determines said business object definition for said object without pre-defined business object definitions.

Mitchell et al does disclose:

Art Unit: 2166

wherein said collaboration code determines said business object definition for said object without pre-defined business object definitions (see paragraphs [0022] - [0025]).

It would have been obvious to have modified the teachings of <u>Burke et al.</u> and <u>Sheard et al.</u> by the teachings of <u>Mitchell et al.</u> to dynamically aggregate inheritance, data, functionality, and entire types to runtime objects (see <u>Mitchell et al</u> paragraph [0017]), because previous methods were too costly and too time consuming (see Mitchell et al paragraph [0010]).

As to claim 21, Burke et al., as modified, discloses:

a broker that receives a second object and a second object definition and that generates said first object using said collaboration code (see <u>Burke et al.</u> col. 34, lines 26-28 and 37-42 and col. 20, lines 21-23).

As to claim 22. Burke et al., as modified, discloses:

wherein said collaboration code determines how said first object is derived from said second object (see <u>Burke et al.</u> col. 21, lines 1-5).

As to claim 23, Burke et al., as modified, discloses:

wherein said collaboration code determines how said first object is derived from second object and said second object definition (see <u>Burke et al.</u> col. 21, lines 1-5).

As to claim 24, Burke et al., as modified, discloses:

Art Unit: 2166

an application adapter that receives said first object and said first object definition from said reverse object discovery agent (see <u>Burke et al.</u> col. 34, lines 26-28 and lines 37-42 and col. 42, lines 64-66).

As to claim 25, Burke et al., as modified, discloses:

determining whether an object conforms to a known object definition (see col. 21, lines 12-15); and

Storing said business object definition (see col. 25, lines 23-25).

However, Burke et al. does not explicitly disclose:

requesting a collaboration code and an input object definition if said object does not conform to a known object definition; and receiving an object and a collaboration code

Sheard et al. Discloses:

requesting a collaboration code (see col. 14, lines 28-31) and an input object definition if said object does not conform to a known object definition (see col. 31, line 31).

receiving an object (see col. 31, line 31) and a collaboration code (see col. 14, lines 28-31).

It would have been obvious to have modified the teachings of <u>Burke et al.</u> by the teachings of <u>Sheard et al.</u> to provide an improved data integration system and methodology capable of effectively integrating data produced by applications of varying technologies (see <u>Sheard et al.</u> col. 2, lines 65-67 and col. 3, line 1).

Art Unit: 2166

However the combination of <u>Burke et al.</u> and <u>Sheard et al.</u> does not explicitly disclose: wherein said collaboration code determines said business object definition for said object without pre-defined business object definitions.

Mitchell et al does disclose:

wherein said collaboration code determines said business object definition for said object without pre-defined business object definitions (see paragraphs [0022] - [0025]).

It would have been obvious to have modified the teachings of <u>Burke et al.</u> and <u>Sheard et al.</u> by the teachings of <u>Mitchell et al.</u> to dynamically aggregate inheritance, data, functionality, and entire types to runtime objects (see <u>Mitchell et al</u> paragraph [0017]), because previous methods were too costly and too time consuming (see Mitchell et al paragraph [0010]).

As to claim 26, <u>Burke et al.</u>, as modified, discloses: analyzing said collaboration code and said input object definition (see <u>Burke et al.</u> col. 21, lines 1-8).

As to claim 27, <u>Burke et al.</u>, as modified, discloses: creating a new object definition based upon the results of said analyzing (see <u>Burke et al.</u> col. 20, lines 21-23).

As to claim 28, Burke et al., as modified, discloses:

Art Unit: 2166

forwarding said object if said object conforms to a known object definition (see <u>Burke et al.</u> col. 34, lines 45-48).

As to claim 29 Burke et al., as modified, discloses:

wherein said object comprises a business object (see <u>Burke et al.</u> col. 34, lines 26-28 and lines 37-42).

As to claim 30, Burke et al., as modified, discloses:

forwarding said new object definition to an application adapter (see <u>Burke et al.</u> col. 34, lines 26-28 and lines 37-42 and <u>Burke et al.</u> col. 42, lines 64-66).

As to claim 31, Burke et al., as modified, discloses:

receiving a subscription from said application adapter for said new object definition (see Burke et al. col. 50, lines 61-63; wherein the notification subscriptions are received and configured).

As to claim 32, Burke et al., as modified, discloses:

forwarding said object in response to said subscription (see <u>Burke et al.</u> col. 34, lines 45-48 and col. 50, lines 58-63).

As to claim 33, Burke et al., disclose:

instructions for determining a business object definition for said object based upon

Art Unit: 2166

said collaboration code (see <u>Burke et al.</u> col. 15, line 53 and col. 17, lines 48-49).

Instructions for storing said business object definition (see <u>Burke et al.</u> col. 15, line 53 and col. 17, lines 48-49.

However, <u>Burke et al.</u> does not explicitly disclose:

instructions for receiving an object and a collaboration code

Sheard et al. Discloses:

instructions for receiving an object and a collaboration code (see <u>Sheard et al.</u> col. 12, lines 28-29).

It would have been obvious to have modified the teachings of <u>Burke et al.</u> by the teachings of <u>Sheard et al.</u> to provide an improved data integration system and methodology capable of effectively integrating data produced by applications of varying technologies (see <u>Sheard et al.</u> col. 2, lines 65-67 and col. 3, line 1).

However the combination of <u>Burke et al.</u> and <u>Sheard et al.</u> does not explicitly disclose: wherein said collaboration code determines said business object definition for said object without pre-defined business object definitions.

Mitchell et al does disclose:

wherein said collaboration code determines said business object definition for said object without pre-defined business object definitions (see paragraphs [0022] - [0025]).

It would have been obvious to have modified the teachings of <u>Burke et al.</u> and <u>Sheard et al.</u> by the teachings of <u>Mitchell et al.</u> to dynamically aggregate inheritance, data, functionality, and entire types to runtime objects (see <u>Mitchell et al</u> paragraph

Art Unit: 2166

[0017]), because previous methods were too costly and too time consuming (see Mitchell et al paragraph [0010]).

As to claim 34, Burke et al., as modified, discloses:

wherein said object comprises a business object (see <u>Burke et al.</u> col. 34, lines 26-28 and lines 37-42).

As to claim 35, Burke et al., as modified, discloses:

instructions for forwarding said new object definition to an application adapter(see <u>Burke</u> et al. col. 34, lines 26-28 and lines 37-42 and <u>Burke et al.</u> col. 42, lines 64-66).

As to claim 36, Burke et al., as modified, discloses:

instructions for receiving a subscription from said application adapter for said new object definition (see <u>Burke et al.</u> col. 15, line 53 and col. 50, lines 61-63; wherein the notification subscriptions are received and configured).

As to claim 37, Burke et al., as modified, discloses:

instructions for forwarding said object in response to said subscription (see <u>Burke et al.</u> col. 15, line 53, col. 34, lines 45-48 and col. 50, lines 58-63).

As to claim 38, Burke et al., as modified, discloses:

Art Unit: 2166

Wherein said collaboration code comprise dynamically generated business object newly discovered during runtime (see Mitchell et al paragraphs [0022] - [0025]).

Response to Arguments

7. Applicant's arguments with respect to claim1, 13, 20, 25, and 33 have been considered but are most in view of the new ground(s) of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP
§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37
CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2166

Page 17

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Johnese Johnson whose telephone number is 571-270-1097. The examiner can normally be reached on 4/5/9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

11 February 2008

JJ

Meren Abellall pomany Examiner